SEQUENCE LISTING

<110>   Fairlie, David P
         Shepherd, Nicholas E

<120>   ALPHA HELICAL MIMICS, THEIR USES AND METHODS FOR THEIR PRODUCTION

<130>   23558-023USNAT'L

<140>   10/593,407
<141>   2006-09-19

<150>   PCT/AU2005/000400
<151>   2005-03-21

<150>   AU2004901447
<151>   2004-03-19

<160>   79

<170>   PatentIn version 3.3

<210>   1
<211>   5
<212>   PRT
<213>   Artificial

<220>
<223>   Cyclic peptide

<220>
<221>   MISC_FEATURE
<222>   (2)..(2)
<223>   Xaa = any amino acid

<220>
<221>   MISC_FEATURE
<222>   (3)..(3)
<223>   Xaa = any amino acid

<220>
<221>   MISC_FEATURE
<222>   (4)..(4)
<223>   Xaa = any amino acid

<400>   1

Lys Xaa Xaa Xaa Asp
1   5

<210>   2
<211>   5
<212>   PRT
<213>   Artificial

<220>
<223>   Cyclic peptide

<220>
<221>   MISC_FEATURE

```
<222>  (2)..(2)
<223>  Xaa = any amino acid

<220>
<221>  MISC_FEATURE
<222>  (3)..(3)
<223>  Xaa = any amino acid

<220>
<221>  MISC_FEATURE
<222>  (4)..(4)
<223>  Xaa = any amino acid

<400>  2

Asp Xaa Xaa Xaa Lys
1               5


<210>  3
<211>  5
<212>  PRT
<213>  Artificial

<220>
<223>  Cyclic peptide


<220>
<221>  MISC_FEATURE
<222>  (2)..(2)
<223>  Xaa = any amino acid

<220>
<221>  MISC_FEATURE
<222>  (3)..(3)
<223>  Xaa = any amino acid

<220>
<221>  MISC_FEATURE
<222>  (4)..(4)
<223>  Xaa = any amino acid

<400>  3

Lys Xaa Xaa Xaa Glu
1               5


<210>  4
<211>  5
<212>  PRT
<213>  Artificial

<220>
<223>  Cyclic peptide


<220>
<221>  MISC_FEATURE
<222>  (2)..(2)
<223>  Xaa = any amino acid
```

```
<220>
<221>  MISC_FEATURE
<222>  (3)..(3)
<223>  Xaa = any amino acid

<220>
<221>  MISC_FEATURE
<222>  (4)..(4)
<223>  Xaa = any amino acid

<400>  4

Glu Xaa Xaa Xaa Lys
1                 5


<210>  5
<211>  5
<212>  PRT
<213>  Artificial

<220>
<223>  Cyclic peptide


<220>
<221>  MOD_RES
<222>  (1)..(1)
<223>  Orn

<220>
<221>  MISC_FEATURE
<222>  (2)..(2)
<223>  Xaa = any amino acid

<220>
<221>  MISC_FEATURE
<222>  (3)..(3)
<223>  Xaa = any amino acid

<220>
<221>  MISC_FEATURE
<222>  (4)..(4)
<223>  Xaa = any amino acid

<400>  5

Xaa Xaa Xaa Xaa Asp
1                 5


<210>  6
<211>  5
<212>  PRT
<213>  Artificial

<220>
<223>  Cyclic peptide


<220>
<221>  MISC_FEATURE
<222>  (2)..(2)
```

<223>   Xaa = any amino acid

<220>
<221>   MISC_FEATURE
<222>   (3)..(3)
<223>   Xaa = any amino acid

<220>
<221>   MISC_FEATURE
<222>   (4)..(4)
<223>   Xaa = any amino acid

<220>
<221>   MOD_RES
<222>   (5)..(5)
<223>   Orn

<400>   6

Asp Xaa Xaa Xaa Xaa
1   5

<210>   7
<211>   6
<212>   PRT
<213>   Artificial

<220>
<223>   Cyclic peptide

<220>
<221>   MISC_FEATURE
<222>   (1)..(1)
<223>   Xaa = any amino acid

<220>
<221>   MISC_FEATURE
<222>   (3)..(3)
<223>   Xaa = any amino acid

<220>
<221>   MISC_FEATURE
<222>   (4)..(4)
<223>   Xaa = any amino acid

<220>
<221>   MISC_FEATURE
<222>   (5)..(5)
<223>   Xaa = any amino acid

<400>   7

Xaa Lys Xaa Xaa Xaa Asp
1   5

<210>   8
<211>   5
<212>   PRT
<213>   Artificial

<220>
<223> Cyclic peptide

<400> 8

Lys Ala Arg Ala Asp
1   5

<210> 9
<211> 5
<212> PRT
<213> Artificial

<220>
<223> Cyclic peptide

<400> 9

Asp Ala Arg Ala Lys
1   5

<210> 10
<211> 5
<212> PRT
<213> Artificial

<220>
<223> Cyclic peptide

<400> 10

Lys Ala Arg Ala Glu
1   5

<210> 11
<211> 5
<212> PRT
<213> Artificial

<220>
<223> Cyclic peptide

<400> 11

Glu Ala Arg Ala Lys
1   5

<210> 12
<211> 5
<212> PRT
<213> Artificial

<220>
<223> Cyclic peptide

<220>
<221> MOD_RES
<222> (1)..(1)

<223>   Orn

<400>   12

Xaa Ala Arg Ala Asp
1   5

<210>   13
<211>   5
<212>   PRT
<213>   Artificial

<220>
<223>   Cyclic peptide

<220>
<221>   MOD_RES
<222>   (5)..(5)
<223>   Orn

<400>   13

Asp Ala Arg Ala Xaa
1   5

<210>   14
<211>   5
<212>   PRT
<213>   Artificial

<220>
<223>   Cyclic peptide

<400>   14

Lys Ala Arg Ala Asp
1   5

<210>   15
<211>   5
<212>   PRT
<213>   Artificial

<220>
<223>   Cyclic peptide

<400>   15

Lys Leu Leu Leu Asp
1   5

<210>   16
<211>   5
<212>   PRT
<213>   Artificial

<220>
<223>   Cyclic peptide

<400> 16

Lys Leu Ala Leu Asp
1   5

<210> 17
<211> 5
<212> PRT
<213> Artificial

<220>
<223> Cyclic peptide

<400> 17

Lys Leu Phe Ala Asp
1   5

<210> 18
<211> 5
<212> PRT
<213> Artificial

<220>
<223> Cyclic peptide

<220>
<221> MOD_RES
<222> (1)..(1)
<223> Orn

<400> 18

Xaa Ala Arg Ala Glu
1   5

<210> 19
<211> 5
<212> PRT
<213> Artificial

<220>
<223> Cyclic peptide

<220>
<221> MOD_RES
<222> (5)..(5)
<223> Orn

<400> 19

Glu Ala Arg Ala Xaa
1   5

<210> 20
<211> 5

```
<212>  PRT
<213>  Artificial

<220>
<223>  Cyclic peptide

<400>  20

Lys Ala Arg Ala Asp
1               5


<210>  21
<211>  5
<212>  PRT
<213>  Artificial

<220>
<223>  Cyclic peptide

<400>  21

Lys Ala Arg Ala Asp
1               5


<210>  22
<211>  5
<212>  PRT
<213>  Artificial

<220>
<223>  Cyclic peptide

<400>  22

Lys Ala Arg Ala Asp
1               5


<210>  23
<211>  5
<212>  PRT
<213>  Artificial

<220>
<223>  Cyclic peptide

<400>  23

Lys Ala Ala Ala Asp
1               5


<210>  24
<211>  5
<212>  PRT
<213>  Artificial

<220>
<223>  Cyclic peptide

<400>  24
```

Lys Ala Leu Ala Asp
1   5

<210>   25
<211>   5
<212>   PRT
<213>   Artificial

<220>
<223>   Cyclic peptide

<400>   25

Lys Ala Met Ala Asp
1   5

<210>   26
<211>   5
<212>   PRT
<213>   Artificial

<220>
<223>   Cyclic peptide

<400>   26

Lys Ala Gln Ala Asp
1   5

<210>   27
<211>   5
<212>   PRT
<213>   Artificial

<220>
<223>   Cyclic peptide

<400>   27

Lys Ala Phe Ala Asp
1   5

<210>   28
<211>   5
<212>   PRT
<213>   Artificial

<220>
<223>   Cyclic peptide

<400>   28

Lys Ala Gly Ala Asp
1   5

<210>   29
<211>   5

<212>   PRT
<213>   Artificial

<220>
<223>   Cyclic peptide

<400>   29

Lys Gly Ser Ala Asp
1   5

<210>   30
<211>   5
<212>   PRT
<213>   Artificial

<220>
<223>   Cyclic peptide

<400>   30

Lys Ser Ser Ser Asp
1   5

<210>   31
<211>   5
<212>   PRT
<213>   Artificial

<220>
<223>   Cyclic peptide

<400>   31

Lys Gly Gly Gly Asp
1   5

<210>   32
<211>   5
<212>   PRT
<213>   Artificial

<220>
<223>   Cyclic peptide

<220>
<221>   MISC_FEATURE
<222>   (2)..(2)
<223>   Xaa = any amino acid

<220>
<221>   MISC_FEATURE
<222>   (3)..(3)
<223>   Xaa = any amino acid

<220>
<221>   MISC_FEATURE
<222>   (4)..(4)
<223>   Xaa = any amino acid

<400> 32

Lys Xaa Xaa Xaa Asp
1   5

<210> 33
<211> 5
<212> PRT
<213> Artificial

<220>
<223> Cyclic peptide

<220>
<221> MISC_FEATURE
<222> (2)..(2)
<223> Xaa = any amino acid

<220>
<221> MISC_FEATURE
<222> (3)..(3)
<223> Xaa = any amino acid

<220>
<221> MISC_FEATURE
<222> (4)..(4)
<223> Xaa = any amino acid

<400> 33

Asp Xaa Xaa Xaa Lys
1   5

<210> 34
<211> 5
<212> PRT
<213> Artificial

<220>
<223> Cyclic peptide

<220>
<221> MISC_FEATURE
<222> (2)..(2)
<223> Xaa = any amino acid

<220>
<221> MISC_FEATURE
<222> (3)..(3)
<223> Xaa = any amino acid

<220>
<221> MISC_FEATURE
<222> (4)..(4)
<223> Xaa = any amino acid

<400> 34

Lys Xaa Xaa Xaa Glu
1   5

<210>   35
<211>   5
<212>   PRT
<213>   Artificial

<220>
<223>   Cyclic peptide

<220>
<221>   MISC_FEATURE
<222>   (2)..(2)
<223>   Xaa = any amino acid

<220>
<221>   MISC_FEATURE
<222>   (3)..(3)
<223>   Xaa = any amino acid

<220>
<221>   MISC_FEATURE
<222>   (4)..(4)
<223>   Xaa = any amino acid

<400>   35

Glu Xaa Xaa Xaa Lys
1   5

<210>   36
<211>   5
<212>   PRT
<213>   Artificial

<220>
<223>   Cyclic peptide

<220>
<221>   MOD_RES
<222>   (1)..(1)
<223>   Orn

<220>
<221>   MISC_FEATURE
<222>   (2)..(2)
<223>   Xaa = any amino acid

<220>
<221>   MISC_FEATURE
<222>   (3)..(3)
<223>   Xaa = any amino acid

<220>
<221>   MISC_FEATURE
<222>   (4)..(4)
<223>   Xaa = any amino acid

<400> 36

Xaa Xaa Xaa Xaa Asp
1   5

<210> 37
<211> 5
<212> PRT
<213> Artificial

<220>
<223> Cyclic peptide

<220>
<221> MISC_FEATURE
<222> (2)..(2)
<223> Xaa = any amino acid

<220>
<221> MISC_FEATURE
<222> (3)..(3)
<223> Xaa = any amino acid

<220>
<221> MISC_FEATURE
<222> (4)..(4)
<223> Xaa = any amino acid

<220>
<221> MOD_RES
<222> (5)..(5)
<223> Orn

<400> 37

Asp Xaa Xaa Xaa Xaa
1   5

<210> 38
<211> 5
<212> PRT
<213> Artificial

<220>
<223> Cyclic peptide

<400> 38

Lys Ala Arg Ala Asp
1   5

<210> 39
<211> 5
<212> PRT
<213> Artificial

<220>
<223> Cyclic peptide

<400> 39

Asp Ala Arg Ala Lys
1   5

<210> 40
<211> 5
<212> PRT
<213> Artificial

<220>
<223> Cyclic peptide

<400> 40

Lys Ala Arg Ala Glu
1   5

<210> 41
<211> 5
<212> PRT
<213> Artificial

<220>
<223> Cyclic peptide

<400> 41

Glu Ala Arg Ala Lys
1   5

<210> 42
<211> 5
<212> PRT
<213> Artificial

<220>
<223> Cyclic peptide

<220>
<221> MOD_RES
<222> (1)..(1)
<223> Orn

<400> 42

Xaa Ala Arg Ala Asp
1   5

<210> 43
<211> 5
<212> PRT
<213> Artificial

<220>
<223> Cyclic peptide

```
<220>
<221>  MOD_RES
<222>  (5)..(5)
<223>  Orn

<400>  43

Asp Ala Arg Ala Xaa
1                   5


<210>  44
<211>  5
<212>  PRT
<213>  Artificial

<220>
<223>  Cyclic peptide

<400>  44

Lys Ala Ala Ala Asp
1                   5


<210>  45
<211>  5
<212>  PRT
<213>  Artificial

<220>
<223>  Cyclic peptide

<400>  45

Lys Gly Ser Ala Asp
1                   5


<210>  46
<211>  10
<212>  PRT
<213>  Artificial

<220>
<223>  Cyclic peptide

<400>  46

Lys Ala Arg Ala Asp Lys Ala Arg Ala Asp
1                   5                   10


<210>  47
<211>  15
<212>  PRT
<213>  Artificial

<220>
<223>  Cyclic peptide

<400>  47
```

```
Lys Ala Arg Ala Asp Lys Ala Arg Ala Asp Lys Ala Arg Ala Asp
1               5                   10                  15
```

```
<210>   48
<211>   17
<212>   PRT
<213>   Artificial

<220>
<223>   Cyclic peptide

<400>   48
```

```
Phe Gly Gly Phe Thr Gly Ala Arg Lys Ser Ala Arg Lys Leu Ala Asn
1               5                   10                  15
```

```
Gln
```

```
<210>   49
<211>   14
<212>   PRT
<213>   Artificial

<220>
<223>   Cyclic peptide

<400>   49
```

```
Phe Gly Phe Thr Lys Ala Arg Lys Asp Lys Arg Lys Leu Asp
1               5                   10
```

```
<210>   50
<211>   15
<212>   PRT
<213>   Artificial

<220>
<223>   Cyclic peptide

<400>   50
```

```
Gly Gly Gly Phe Thr Lys Ala Arg Lys Asp Lys Arg Lys Leu Asp
1               5                   10                  15
```

```
<210>   51
<211>   10
<212>   PRT
<213>   Artificial

<220>
<223>   Cyclic peptide

<400>   51
```

```
Lys Ala Arg Lys Asp Lys Arg Lys Leu Asp
1               5                   10
```

```
<210>    52
<211>    5
<212>    PRT
<213>    Artificial

<220>
<223>    Cyclic peptide

<400>    52

Lys Ala Arg Ala Asp
1               5


<210>    53
<211>    5
<212>    PRT
<213>    Artificial

<220>
<223>    Cyclic peptide

<400>    53

Lys Ala Arg Ala Asp
1               5


<210>    54
<211>    10
<212>    PRT
<213>    Artificial

<220>
<223>    Cyclic peptide

<400>    54

Lys Ala Arg Ala Asp Lys Ala Arg Ala Asp
1               5                   10


<210>    55
<211>    15
<212>    PRT
<213>    Artificial

<220>
<223>    Cyclic peptide

<400>    55

Lys Ala Arg Ala Asp Lys Ala Arg Ala Asp Lys Ala Arg Ala Asp
1               5                   10                  15


<210>    56
<211>    12
<212>    PRT
<213>    Artificial

<220>
```

<223>   Cyclic peptide

<220>
<221>   MISC_FEATURE
<222>   (1)..(1)
<223>   X = hydrophobic amino acid

<220>
<221>   MISC_FEATURE
<222>   (2)..(2)
<223>   Xaa = any amino acid

<220>
<221>   MISC_FEATURE
<222>   (3)..(3)
<223>   Xaa = any amino acid

<220>
<221>   MISC_FEATURE
<222>   (4)..(4)
<223>   Xaa = any amino acid

<220>
<221>   MISC_FEATURE
<222>   (5)..(5)
<223>   X = hydrophobic amino acid

<220>
<221>   MISC_FEATURE
<222>   (6)..(6)
<223>   Xaa = any amino acid

<220>
<221>   MISC_FEATURE
<222>   (7)..(7)
<223>   Xaa = any amino acid

<220>
<221>   MISC_FEATURE
<222>   (8)..(8)
<223>   X = hydrophobic amino acid

<220>
<221>   MISC_FEATURE
<222>   (9)..(9)
<223>   Xaa = any amino acid

<220>
<221>   MISC_FEATURE
<222>   (10)..(10)
<223>   X = negatively charged amino acid

<220>
<221>   MISC_FEATURE
<222>   (11)..(11)
<223>   Xaa = any amino acid

<220>
<221>   MISC_FEATURE
<222>   (12)..(12)
<223>   X = hydrophobic amino acid

<400> 56

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
1   5   10

<210> 57
<211> 12
<212> PRT
<213> Artificial

<220>
<223> Cyclic peptide

<400> 57

Tyr Lys Arg Glu Leu Asp Lys Met Ala Asp Asp Phe
1   5   10

<210> 58
<211> 12
<212> PRT
<213> Artificial

<220>
<223> Cyclic peptide

<400> 58

Val Lys Arg Gln Leu Asp Lys Ile Ala Asp Asp Ile
1   5   10

<210> 59
<211> 11
<212> PRT
<213> Artificial

<220>
<223> Cyclic peptide

<400> 59

Lys Ala Gln Glu Asp Lys Val Ala Asp Asp Met
1   5   10

<210> 60
<211> 11
<212> PRT
<213> Artificial

<220>
<223> Cyclic peptide

<400> 60

Lys Ala Gln Glu Asp Lys Ile Ala Asp Asp Phe
1   5   10

<210> 61

<211>   10
<212>   PRT
<213>   Artificial

<220>
<223>   Cyclic peptide

<400>   61

Lys Arg Glu Leu Asp Lys Met Ala Asp Asp
1   5   10

<210>   62
<211>   10
<212>   PRT
<213>   Artificial

<220>
<223>   Cyclic peptide

<400>   62

Lys Arg Gln Leu Asp Lys Ile Ala Asp Asp
1   5   10

<210>   63
<211>   10
<212>   PRT
<213>   Artificial

<220>
<223>   Cyclic peptide

<400>   63

Lys Ala Gln Glu Asp Lys Val Ala Asp Asp
1   5   10

<210>   64
<211>   10
<212>   PRT
<213>   Artificial

<220>
<223>   Cyclic peptide

<400>   64

Lys Ala Gln Glu Asp Lys Ile Ala Asp Asp
1   5   10

<210>   65
<211>   8
<212>   PRT
<213>   Artificial

<220>
<223>   Cyclic peptide

<400> 65

Leu Arg Lys Met Ala Asp Asp Phe
1   5

<210> 66
<211> 8
<212> PRT
<213> Artificial

<220>
<223> Cyclic peptide

<400> 66

Leu Ala Lys Ile Ala Asp Asp Ile
1   5

<210> 67
<211> 8
<212> PRT
<213> Artificial

<220>
<223> Cyclic peptide

<400> 67

Leu Ala Lys Val Ala Asp Asp Ile
1   5

<210> 68
<211> 8
<212> PRT
<213> Artificial

<220>
<223> Cyclic peptide

<400> 68

Leu Ala Lys Ile Ala Asp Asp Phe
1   5

<210> 69
<211> 5
<212> PRT
<213> Artificial

<220>
<223> Cyclic peptide

<400> 69

Lys Met Ala Asp Asp
1   5

<210> 70

```
<211>   5
<212>   PRT
<213>   Artificial

<220>
<223>   Cyclic peptide

<400>   70

Lys Ile Ala Asp Asp
1               5


<210>   71
<211>   5
<212>   PRT
<213>   Artificial

<220>
<223>   Cyclic peptide

<400>   71

Lys Val Ala Asp Asp
1               5


<210>   72
<211>   5
<212>   PRT
<213>   Artificial

<220>
<223>   Cyclic peptide

<400>   72

Lys Met Ala Asp Asp
1               5


<210>   73
<211>   6
<212>   PRT
<213>   Artificial

<220>
<223>   Cyclic peptide

<400>   73

Phe Met Lys Glu Asp Leu
1               5


<210>   74
<211>   4
<212>   PRT
<213>   Artificial

<220>
<223>   Cyclic peptide
```

<400> 74

Met Lys Glu Asp
1

<210> 75
<211> 3
<212> PRT
<213> Artificial

<220>
<223> Cyclic peptide

<400> 75

Lys Glu Asp
1

<210> 76
<211> 15
<212> PRT
<213> Artificial

<220>
<223> Cyclic peptide

<400> 76

Phe Gly Gly Phe Thr Lys Ala Arg Lys Asp Lys Arg Lys Leu Asp
1   5   10   15

<210> 77
<211> 15
<212> PRT
<213> Artificial

<220>
<223> Cyclic peptide

<220>
<221> MISC_FEATURE
<222> (1)..(1)
<223> X = Nphe

<400> 77

Xaa Gly Gly Phe Thr Lys Ala Arg Lys Asp Lys Arg Lys Leu Asp
1   5   10   15

<210> 78
<211> 11
<212> PRT
<213> Artificial

<220>
<223> Cyclic peptide

<400> 78

Thr Lys Ala Arg Lys Asp Lys Arg Lys Leu Asp
1   5   10

<210>   79
<211>   10
<212>   PRT
<213>   Artificial

<220>
<223>   Cyclic peptide

<400>   79

Lys Ala Arg Lys Asp Lys Arg Lys Leu Asp
1   5   10